

CLAIMS:

1. An element, comprising:
a bimodal spring member movable between a first stable position and a second stable position; and
an arm extending from the bimodal spring member, wherein the arm moves in response to the bimodal spring member changing between the first stable position and the second stable position.

2. An element according to claim 1, wherein the bimodal spring member and the arm form an integral unit.

3. An element according to claim 1, further including:
a retaining element extending from the arm.

4. An element according to claim 3, wherein the retaining element defines a heel-capturing member.

5. An element according to claim 3, wherein the retaining element, the arm, and the bimodal spring member form an integral unit.

6. An element according to claim 1, further including:
an arm/bimodal spring interface that induces changes in position of the arm in response to the bimodal spring member changing between the first stable position and the second stable position.

7. An element according to claim 6, wherein at least some portion of the arm/bimodal spring interface extends through an opening defined in the bimodal spring member when the bimodal spring member is in the first stable position.

8. An element according to claim 7, wherein the portion of the arm/bimodal spring interface that extends through the opening when the bimodal spring member is in the first stable position does not extend through the opening when the bimodal spring member is in the second stable position.

9. An element according to claim 6, wherein the arm/bimodal spring interface, the arm, and the bimodal spring member form an integral unit.

10. An element according to claim 1, wherein when the bimodal spring member is in the first stable position, the arm is in an open position, and when the bimodal spring member is in the second stable position, the arm is in a closed position.

11. An element according to claim 1, further including:

a retaining element extending from the arm; and

an arm/bimodal spring interface that induces changes in position of the arm in response to the bimodal spring member changing between the first stable position and the second stable position.

12. An element according to claim 11, wherein the retaining element, the arm/bimodal spring interface, the arm, and the bimodal spring member form an integral unit.

13. An element according to claim 1, wherein the bimodal spring member is round or oval shaped with an opening defined therein.

14. An element according to claim 1, wherein the bimodal spring member stably maintains the first stable position and the second stable position when no external force is applied to the spring member.

15. A piece of footwear, comprising:

a shoe member; and

a foot-engaging element attached to the shoe member, wherein the foot-engaging element includes: (a) a bimodal spring member movable between a first stable position and a second stable position, and (b) an arm extending from the bimodal spring member, wherein the arm moves in response to the bimodal spring member changing between the first stable position and the second stable position.

16. A piece of footwear according to claim 15, wherein the foot-engaging element forms an integral unit.

17. A piece of footwear according to claim 15, wherein the foot-engaging element further includes a foot-retaining element extending from the arm.

18. A piece of footwear according to claim 17, wherein the foot-retaining element defines a heel-capturing member.

19. A piece of footwear according to claim 17, wherein the foot-retaining element, the arm, and the bimodal spring member are relatively positioned so as to define a space for receiving a user's toes.

20. A piece of footwear according to claim 17, wherein the foot-retaining element, the arm, and the bimodal spring member form an integral unit.

21. A piece of footwear according to claim 15, wherein the foot-engaging element is located at a heel portion of the shoe member.

22. A piece of footwear according to claim 15, wherein the foot-engaging element is located at a toe portion of the shoe member.

23. A piece of footwear according to claim 15, wherein the foot-engaging element includes an arm/bimodal spring interface that induces changes in position of the arm in response to the bimodal spring member changing between the first stable position and the second stable position.

24. A piece of footwear according to claim 23, wherein at least some portion of the arm/bimodal spring interface extends through an opening defined in the bimodal spring member when the bimodal spring member is in the first stable position.

25. A piece of footwear according to claim 24, wherein the portion of the arm/bimodal spring interface that extends through the opening when the bimodal spring member is in the first stable position does not extend through the opening when the bimodal spring member is in the second stable position.

26. A piece of footwear according to claim 23, wherein the arm/bimodal spring interface, the arm, and the bimodal spring member form an integral unit.

27. A piece of footwear according to claim 15, wherein when the bimodal spring member is in the first stable position, the arm is in a foot-receiving position, and when the bimodal spring member is in the second stable position, the arm is in a foot-engaging position.

28. A piece of footwear according to claim 15, wherein the foot-engaging element further includes: (c) a foot-retaining element extending from the arm, and (d) an arm/bimodal spring interface that induces changes in position of the arm in response to the bimodal spring member changing between the first stable position and the second stable position.

29. A piece of footwear according to claim 28, wherein the foot-retaining element, the arm/bimodal spring interface, the arm, and the bimodal spring member form an integral unit.

30. A piece of footwear according to claim 15, wherein the foot-engaging element, at least in part, connects a midsole of the shoe member to a footbed of the shoe member.

31. A piece of footwear according to claim 15, wherein the foot-engaging element, at least in part, connects an outsole of the shoe member to a midsole of the shoe member.

32. A piece of footwear according to claim 15, wherein the bimodal spring member is round or oval shaped with an opening defined therein.

33. A piece of footwear according to claim 15, wherein the bimodal spring member stably maintains the first stable position and the second stable position when no external force is applied to the spring member.

34. A method of engaging a foot-receiving device with a user's foot, comprising:
orienting a bimodal spring member in a first stable position to place a foot-engaging portion of the foot-receiving device in a foot-accepting position; and

moving the bimodal spring member from the first stable position to a second stable position to thereby move the foot-engaging portion of the foot-receiving device to a foot-engaging position.

35. A method according to claim 34, wherein, in the foot-engaging position, the foot-engaging portion of the foot-receiving device engages a user's heel.

36. A method according to claim 34, wherein, in the foot-engaging position, the foot-engaging portion of the foot-receiving device engages a user's toes.

37. A method according to claim 34, wherein the bimodal spring member is moved from the first stable position to the second stable position by a user's foot.

38. A method according to claim 34, wherein the bimodal spring member stably maintains the first stable position and the second stable position when no external force is applied to the spring member.

39. A method of engaging an engaging device to another member, comprising:
orienting a bimodal spring member in a first stable position to place an engaging portion of the engaging device in an open position; and

moving the bimodal spring member from the first stable position to a second stable position to thereby move the engaging portion of the engaging device to a closed position.

40. A method according to claim 39, wherein the bimodal spring member stably maintains the first stable position and the second stable position when no external force is applied to the spring member.